## Model Energy Code Information

All new buildings, or additions to existing buildings, which will be heated or cooled must meet the minimum requirements of the CABO Model Energy Code/1995. The provisions of this code shall regulate the design of building envelopes for adequate thermal resistance and low air leakage and the design and selection of mechanical, electrical, service water-heating and illumination systems and equipment which will enable effective use of energy in new construction. It is intended that these provisions provide flexibility to permit the use of innovative approaches and techniques to achieve effective utilization of energy.

The DOE Office of Building Technology, State and Community Programs (BTS) Building Standards and Guidelines Program (BSGP), has <u>FREE</u> software available at the following web site: <a href="http://www.energycodes.gov/rescheck/download.stm">http://www.energycodes.gov/rescheck/download.stm</a>
The REScheck and COMcheck software are easy to use, and enable you to check your building for compliance with the Model Energy Code.

In addition, a trade-off worksheet, which is a part of the REScheck Trade-Off Worksheet User's Guide, can be used instead of the computer program (web site: <a href="http://www.energycodes.gov/rescheck/pdfs/mec\_tradeoff.pdf">http://www.energycodes.gov/rescheck/pdfs/mec\_tradeoff.pdf</a>). The worksheet is also available in our office.

The computer program has default U-values for windows and doors. Some windows and doors which are produced today, are more energy efficient than the computer default units (and consequently have a lower U-value than the default value used by the program). Check with your distributor/supplier of windows and doors to determine the actual U-value of the components you will use.

For an addition to a house, there are two approaches to achieve compliance. The first is to evaluate the energy efficiency of the addition by itself. If it does not comply (usually because of large window and sliding glass door areas), a whole house evaluation may be made. The new addition is to be included as a part of the whole house, and an evaluation done of the entire structure. Existing construction which is energy efficient, may offset the inefficiency of new construction. However, the opposite is usually the norm. Older houses usually have less insulation, less energy efficient windows and doors, and less efficient heating/cooling systems. It is often difficult to determine the amount of insulation in existing wall cavities, or under concrete slabs, so using a "whole house" approach can be difficult.

Please contact the Office of Code Administration at 703 385-7830, if you have any questions concerning the Model Energy Code.